

PDB-C156

Silicon Photodiode

The PDB-C156 is an 8 mm² active area BLUE enhanced PIN silicon photodiode assembled in water clear side looking plastic molded package.

Applications

Smoke Detectors

Data Link

NIR Remotes

Features

Plastic Mold Package

Photoconductive

High Speed

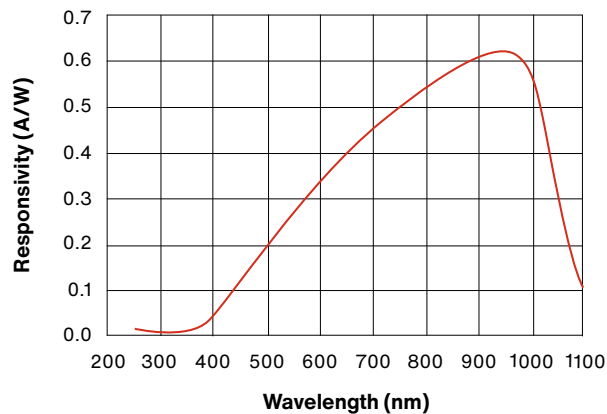
Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Reverse Voltage	V_R	-	50	V
Operating Temperature	T_{OP}	-40	+80	°C
Storage Temperature	T_{STG}	-40	+100	°C
Package	Sidelooking Plastic Mold			

Typical Electro-Optical Specifications at $T_A=23\text{ °C}$

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Active Area	-	A.A.	-	8.02	-	mm ²
Spectral Range	-	λ	400	-	1100	nm
Short Circuit Current	H=100 fc, 2850K	I_{SC}	70	90	-	μA
Capacitance	$V_R=10\text{V}; f=1\text{MHz}$	C_J	-	10	15	pF
Dark Current	$V_R=10\text{V}$	I_D	-	2	15	nA
Shunt Resistance	$V_R=10\text{mV}$	R_{SH}	100	150	-	M Ω
Noise Equivalent Power	$V_R=10\text{V}$ @ $\lambda=\text{Peak}$	NEP	-	4.4×10^{-14}	-	W/ $\sqrt{\text{Hz}}$
Response Time	$R_L=1\text{K}\Omega, V_R=10\text{V}$	T_R	-	15	-	nS

Spectral Response



Mechanical Specifications

Units are in inches (mm)

